Amendments to the Specification:

Please replace the second full paragraph on page 7, lines 5-10, with the following amended paragraph:

~~**Figure 3 (panels A-C) depicts**~~ **Figures 3A-3C** depict the "Protein Band-Fishing By Cells" methodology which showed that isolated anterior horn motoneurons survived and grew on PhastGel regions containing MNTF1 and MNTF2 from muscle extract which had been electrophoretically separated into protein bands within the PhastGel. ~~Fig 3 (panels a-c)~~ Figures 3A-3C illustrate the results obtained utilizing the "Protein Band-Fishing By Cells" methodology to isolate the motoneuronotrophic factors MNTF1 and MNTF2.

Please replace the second paragraph on page 16, which spans from page 16 line 13 to page 17 line 7, with the following amended paragraph:

Silver staining demonstrated a total of 34 native protein bands (26 protein bands with an apparent molecular weight of > 30 kD and 8 protein bands with an apparent molecular weight of < 30 kD) separated from the muscle extract. These results are illustrated in ~~Figure 3, panels A-C~~ Figures 3A-3C. Interestingly, large (~25 mm) rhodamine B retrograde-prelabeled motoneurons from the cultured spinal cells were found to survive in only two spatially-distinct regions corresponding to the 35 kD and 22 kD apparent molecular weight protein bands. These results are demonstrated in Figure ~~3, panel B~~ 3B. Moreover, silver staining methodology demonstrated heavier staining of the 35 kD protein band, in comparison to the 22 kD protein band, thus potentially reflecting the relative concentrations of these two trophic factors in the muscle extract. No other types of neuronal cells were found to have survived, nor did the aforementioned motoneurons remain viable in any other locations corresponding to additional proteins with differing apparent molecular weights. These aforementioned results are indicative of the large, rhodamine B retrograde-prelabeled motoneurons having "fished out," from the amongst the 34 total peroneal muscle protein bands, their own trophic factors having apparent molecular weights of 35 kD and 22 kD, and are illustrated in Figure ~~3, panel C~~ 3C. The 35 kD and 22 kD protein bands were designated MNTF1 and MNTF2, respectively.

Please replace the first full paragraph on page 20, lines 6-13, with the following amended paragraph:

Rat MNTF1 and MNTF2 were isolated utilizing the aforementioned Phast System gel electrophoresis apparatus by aseptic excision of the PhastGel sections (~ 1 x 30 mm) containing the 35 kD and 22 kD protein bands, respectively (see ~~Figure 3, panels A-C~~ Figures 3A-3C). Anterior horn motoneurons, isolated from the lumbar spine of 3 week-old Sprague Dawley rats, were then co-cultured with and without the presence of MNTF1- and MNTF2-containing PhastGel sections. Results indicated that both MNTF1- and MNTF2-containing PhastGel sections were capable of supporting the continued viability of the anterior horn motoneurons, as well as supporting neurite outgrowth.